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ABSTRACT

Reading Recovery is an early intervention program that helps low-achieving first-grade children to become independent readers who need no further remediation. Reading Recovery was introduced by Marie M. Clay who, in the mid 1970s, developed procedures with teachers and tested the program in New Zealand. In 1984, the success of the program in New Zealand led researchers at Ohio State University to introduce Reading Recovery to the United States. In February of 1990, Kathryn Manning, consultant to the Maine Department of Education, organized a group of 26 Maine educators to go to Ohio to see Reading Recovery teacher training in action. In the school year 1990-91, Maine teachers began to be trained in Reading Recovery. This state report delineates the implementation of Reading Recovery in Maine schools from 1991-94. The report is divided into the following sections: What Program Participants Say; Program Overview; Program Evaluation Results; Program Implementation; and The Reading Recovery Lesson. (Contains 11 references. Also lists Reading Recovery training sites in Maine.) (NKA)

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READING RECOVERY® IN MAINE

1991–94

State Report

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READING RECOVERY® IN MAINE

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Being able to see children's faces when they realize they can read is the only explanation needed to understand our dedication to this task.

From left to right: Kathryn Manning, Division of Special Services - Maine Department of Education; Paula Moore, Director, University of Maine Center for Reading Recovery; Marie Clay, founder of Reading Recovery, Governor John McKernan, Jr.; Leo G. Martin, Maine Commissioner of Education; Robert Cobb, Dean of the University of Maine College of Education

The *State Report* is published by the University of Maine Center for Reading Recovery, Orono, Maine.

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What Maine Program Participants Say

The effects of Reading Recovery extend far beyond the children served. In questionnaires administered to parents, administrators, and classroom teachers, as well as Reading Recovery teachers and students, individual reactions to the program were collected.

Parents:

"Everyone should have the chance to have a child come home and say, 'I can read!' I'll never forget the feeling."

"He was a mad and angry child because he couldn't read. Now he's happy and wants to read a lot."

"My child's school experience was headed into the negative zone and this really helped to turn it around so that she feels better about herself."

"When I was going to school, they didn't have these programs and I had reading problems which ended up in me dropping out. I believe that without this program, my child too, in years to come would have got frustrated and dropped out of school. Thank you for this program."

Classroom Teachers:

"We've never had this kind of progress in reading at the first grade level before."

"Children's self confidence increases and they begin to participate more in whole group literacy activities."

Administrators:

"We have been able to take 'hard core' learners with real difficulties in reading (and other multiple areas) and turn them into readers."

"Reading Recovery has provided the students with a program that shows results in a short period of time. The self-esteem of the students is greatly improved by their success in reading."

Reading Recovery Teachers in Training:

"My view (of reading) has changed a great deal. Perhaps most importantly, my understanding of reading independence has increased. In my years of teaching, never have I been as successful in getting kids so independent so rapidly."

"I have much more knowledge of the 'practice' of teaching reading. I realize that it is a lot more than just providing a rich repertoire of experiences."

Reading Recovery Children:

"It makes me glad because I get to read to my mother."

Program Overview

Introduction

Reading Recovery is an early intervention program that helps low-achieving first-grade children to become independent readers who need no further remediation. Reading Recovery is also a powerful teacher training model characterized by a robust theory, a tradition of continued learning for teachers, and a strong system of colleague support. It is a unique system intervention that can reduce reading failure, increase teacher involvement, and lower remediation rates.

Reading Recovery operates within entire education systems through three key programs:
1. intensive daily one-on-one instruction for children who are at risk of reading failure;
2. an in-service program through which educators are instructed in proven Reading Recovery techniques; and
3. a network of Reading Recovery educators and administrators who monitor program results and provide support to participating teachers and institutions.

Program History

Reading Recovery was developed by Marie M. Clay who conducted observational research in the mid 1960s that enabled her to design techniques for detecting children's early reading and writing difficulties. In the mid 1970s, she developed Reading Recovery procedures with teachers and tested the program in New Zealand. The success of this pilot program led to the nationwide adoption of Reading Recovery in New Zealand in the early 1980s.

In 1984, the success of the program in New Zealand led researchers at the Ohio State University to introduce Reading Recovery to the United States. In 1993-94, approximately 9,000 Reading Recovery educators in 42 states, the District of Columbia, and 4 Canadian provinces will provide services for an estimated 60,000 children in more than 2,000 school districts. In Maine alone, 128 teachers served 858 children in 71 towns and cities. It is projected that, in 1994-95, 218 teachers will provide services to 1,505 children in 117 Maine towns/cities.

Reading Recovery in Maine

In February of 1990, Kathryn Manning, Consultant for the Division of Special Services at the Maine State Department of Education, organized a group of 26 Maine educators to go to Ohio to see Reading Recovery teacher training in action and to attend the conference. In that group were teachers and administrators from Westbrook, Bangor, Wiscasset, and Bethel, as well as other districts. In school year 1990-91, Bangor and Westbrook sent Teacher Leaders Sandra Lowry and Patricia Jackman to be trained in Texas and New York. Also, in 1991 Paula Moore was sent, by the University of Maine, to New Zealand to train as a university Trainer of Teacher Leaders. Bangor and Westbrook trained the first 23 teachers in Maine in school year 1991-92. Bethel sent a Teacher Leader to be trained in Ohio in that year.

In 1992-93, Moore trained Teacher Leaders at the University of Maine from Caribou, Howland, Harrington/Machias, Wiscasset, South Portland, Benton, and one for the University of Maine. Forty more Reading Recovery teachers were trained through Bangor, Westbrook, Bethel, and at a sub center of the University in Ellsworth. A state steering committee formed and met for the first time in 1992. Members of that committee include the Reading Recovery Teacher-Leader Trainer/Center

Director, Site Coordinators, Teacher Leaders, Reading Recovery teachers, administrators, a parent, and representatives of the Maine State Department of Education Division of Special Services, the Maine Facilitator Project of the National Diffusion Network, and the University of Maine.

Sixty-five more Reading Recovery teachers were trained in 1992-93. In December of 1993, Governor John McKernan, Jr., allocated discretionary funds to support Reading Recovery training and continuing contact with trained teachers. The state legislature allocated additional funds to help support Reading Recovery training and implementation through 1995-96. Kathryn Manning was selected to receive the National Teacher Leader Award for her advocacy of Reading Recovery.

In the spring of 1994, the University offered pilot courses for classroom teachers at three sites. This course came at the request of districts now served by Reading Recovery who wanted primary teachers to learn instructional practices which support children during and after the Reading Recovery intervention and to improve overall literacy instruction in the primary grades. The Center sponsored research which explored the results of this approach and which was used to inform the instruction in courses offered in fall 1994. The Center for Reading Recovery sponsored an institute for classroom teachers and school change agents with a New Zealand teacher trainer in January 1994.

Table 1. Reading Recovery in Maine

	Children Served	Training Sites	Teachers-in Training
1991-92	161	2	23
1992-93	493	4	40
1993-94	858	10	65
1994-95	1,505*	10	87

*Projected

In 1994-95, Moore is training a Teacher Leader for Belfast. Eighty-seven Reading Recovery teachers are training at 10 sites. Each of the regional training sites is offering a year-long course for K-2 classroom teachers to facilitate work with small groups. A pilot program to train special educators is underway in southern Maine. Dr. Marie Clay, founder of Reading Recovery, visited Maine in October 1994 to meet with state stakeholders. During the spring semester, a visiting Teacher Leader from New Zealand will take over the University Teacher Leader duties. *During school year 1994-95, Reading Recovery in Maine expects to serve 57 districts, 117 towns and approximately 1,505 children.*

Northeast Regional Reading Recovery Conference

Among its many professional development activities, Reading Recovery is the primary sponsor of the highly successful Northeast Reading Recovery Conference and Reading Recovery Institute. This annual conference draws teachers, administrators, and Reading Recovery personnel from throughout New England, New York, and Canada. In November 1993, Maine hosted the conference in Portland attended by 1,250. Featured speakers included Barbara Watson, national director of Reading Recovery in New Zealand, and Carol Lyons, U.S. National Director of Reading Recovery.

Reading Recovery Council of North America

Maine participates in the Reading Recovery Council of North America. The initiation of this professional organization is considered a milestone

in the development of Reading Recovery. In order to disseminate research and program results, the Council founded a new international journal focusing on early literacy, *Literacy, Teaching and Learning*, that will begin publication in 1994.

Program for Children

Reading Recovery gives children a second chance to succeed before they enter a cycle of failure. Children are selected for the program based on authentic measures of assessment and teacher judgment. Their regular classroom instruction is then supplemented with daily, one-on-one lessons.

Reading Recovery lessons are designed to help children to develop strategies for hearing sounds in words, representing messages, and monitoring and checking their own reading and writing. The teacher systematically records the child acting on a variety of texts in each lesson and uses these observations to form the basis of the next lesson. Individual instruction continues until the child has demonstrated the ability to succeed as an independent reader, can read at or above the class average, and can continue to learn without later remedial help.

Children . . . continue to learn without later remedial help.

Almost 80% of the children in Maine who have completed a Reading Recovery program have become independent readers. Initial data from Maine is consistent with numerous other studies which have shown that Reading Recovery helps a large majority of low-progress readers achieve continued reading success.

Program for Educators

The remarkable progress that children make in Reading Recovery demonstrates that reading failure is not a foregone conclusion for at-risk students. The key to success for such children is specialized teaching that will enable them to improve quickly—before they are labeled as failures—without disrupting their regular classroom curriculum.

In Reading Recovery, the teacher training begins with a year-long curriculum that integrates theory and practice and is characterized by intensive interaction with colleagues. Following the training year, teachers continue to develop professionally through ongoing contact with their colleagues and instructors. Teachers-in-training teach children while being observed by their colleagues and get feedback on their practice. They reflect on their teaching in the light of literacy theory and peer critique over an extended period of time. Reading Recovery teachers-in-training become literacy experts with highly developed observational skills and a repertoire of intervention strategies that can be tailored to meet the individual needs of students.

Reading Recovery as a System Intervention

As the scope of the instructional program suggests, Reading Recovery is not a teaching methodology that can be packaged and delivered through a set of materials, a workshop, or a series of courses. Reading Recovery is even more than a program for children and educators. It is a program for school systems that want to impact the educational opportunities for at-risk students. The collaboration of the school, the State Department of Education, and the university promotes change within the system to impact instruction for all children.

The program is adopted by a Maine school district or consortia of school districts that have made a

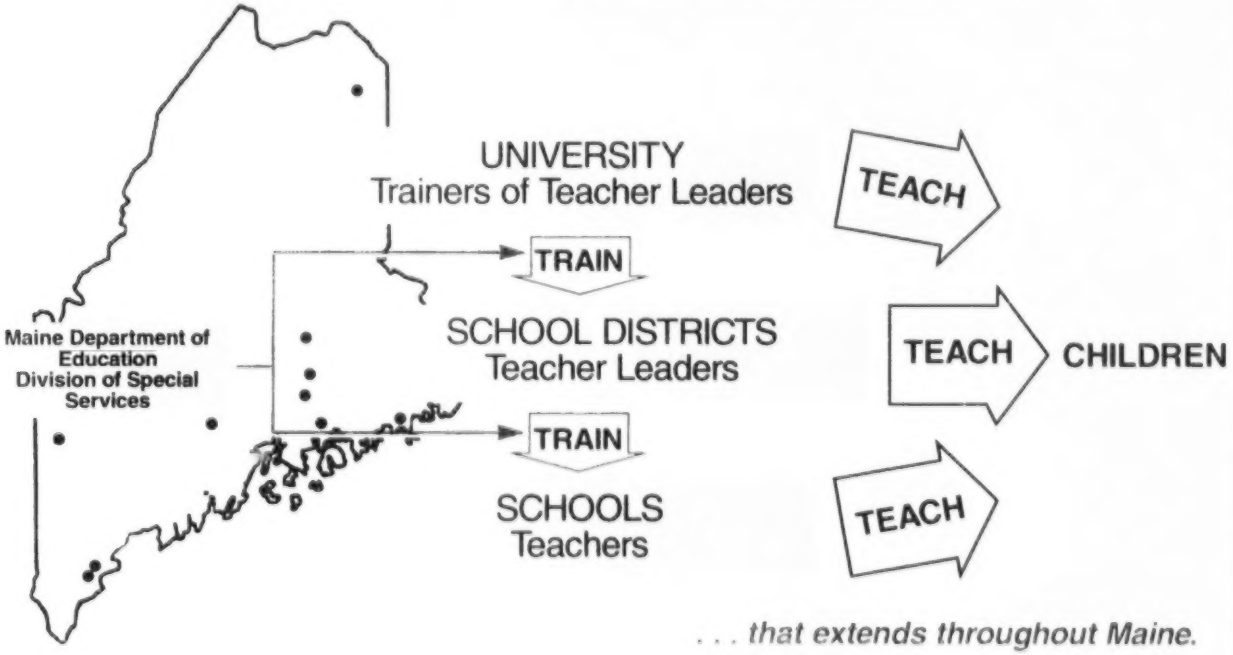
long-term commitment to early literacy in a region. These Reading Recovery sites send an experienced teacher to the University of Maine. Following the training year, these specially prepared Teacher Leaders return to their home districts and work full-time teaching children, training Reading Recovery teachers in a region, and performing other duties related to the operation of a site. In Maine, the regional Reading Recovery teacher training sites are located in Bangor, Belfast, Benton, Bethel, Caribou, Ellsworth, Harrington/Machias, Howland, Orono, South Portland, Westbrook, and Wiscasset.

The benefits of incorporating Reading Recovery extend well beyond the success of individual students who complete the program. The results achieved by the teachers and children involved in Reading Recovery demonstrate for the entire district the impact powerful teaching can have on low-progress children. Through interaction with Reading Recovery teachers, classroom teachers often begin to construct new theories about how children learn—theories that tend to carry over into classroom instruction.

Districts that have adopted Reading Recovery have the additional benefit of lower cost for special services. Reading Recovery has been shown to reduce the rate of retention, special education placements, and remediation beyond first grade. And no time is lost delivering the services that will effect these changes. At most sites, teachers undergo training outside of regular school hours, and they actually begin working with students as the training begins.

The Reading Recovery Network

is a cooperative effort among institutions and educators . . .



. . . that extends throughout Maine.

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Reading Recovery as a Network of Educators and Institutions

Institutions and educators that have adopted Reading Recovery become part of an extensive network to support early literacy. In 1993-94, The Reading Recovery in Maine network included 57 school districts, 215 Reading Recovery teachers, 11 Teacher Leaders, a university Teacher Leader Trainer, and a State Department of Education consultant. These individuals and institutions work together to preserve the integrity of Reading Recovery and improve its effectiveness as an early intervention program in Maine.

Future Directions in Maine

The implementation of Reading Recovery in Maine has presented some unique problems and opportunities. Reading Recovery personnel from throughout the state are actively involved in finding solutions to the early literacy and learning challenges that affect the future success of children.

- With the help of allocations from the state legislature, it is hoped that Reading Recovery will be available to all Maine children who need it by school year 1996-97.

- Courses for the classroom teacher, now being offered at all sites, will continue to expand to meet the expressed needs of Reading Recovery schools.

- Courses will be offered to special educators who desire training in Reading Recovery techniques for hard to teach children.

- The Reading Recovery network will focus on fostering strong literacy teams in each Reading Recovery school to ensure successful implementation of the program.

- The Reading Recovery network will work toward improving the cost-effectiveness of Reading Recovery with regard to the number of lessons per week, when Reading Recovery instruction begins, and decision making by school teams.

Program Evaluation Results

Introduction

The success of Reading Recovery has been carefully documented since its inception. Pilot studies in New Zealand and the United States demonstrated that the program empowers children in the lowest 20% of their class with the strategies necessary to read at or above grade level in an average of fifteen weeks. Follow-up studies in both countries further show that Reading Recovery children continue to read at an average or better level after receiving the intervention, reducing the need for long-term remediation. These results have been replicated regionally throughout North America, and they continue to be supported by the work of the National Data Evaluation Center at Ohio State University, which tracks the progress of every Reading Recovery child in the U.S. and Canada. Each state compiles data for documenting state, as well as national, progress.

Program Evaluation Design and Definitions

Children are selected to participate in Reading Recovery based on teacher judgment and the results of Clay's Observation Survey. The six tasks that make up the Observation Survey are also used to indicate progress over time. Three of the six tasks are used as dependent measures to document the progress of the Reading Recovery children for the national and state studies. These tasks include:

Writing Vocabulary: Children are asked to write all the words they know how to write. The score on this test is the number of words spelled accurately. There is no ceiling for the scores on this measure.

Dictation: Children write a dictated sentence. In scoring, children are given credit for every sound they represent correctly, thus indicating the child's ability to analyze the word for sounds. This measure has a ceiling of 37.

Text Reading: Children are told the title of a selection, given a brief, standard introduction, and asked to read text materials in graded levels of difficulty. The child's text reading level indicates the highest level of text read at 90% or above accuracy. Levels are drawn from a basal reading system that is not part of Reading Recovery instruction or used in any first grade classroom. This measure has a ceiling of Level 30 (i.e. sixth grade reading level).

Using these measures, Reading Recovery children are compared to a random sample of first grade children. This year, Maine also charted the progress of waiting list children to compare with Reading Recovery and random sample children. The following terms describe the children in the study:

Reading Recovery Program Children: All children who receive 60 or more lessons in the program. Sixty lessons is considered the minimum amount of learning time for children to make progress. Children having less than sixty lessons are excluded from the program evaluations as they have not had adequate learning opportunity in the program.

Discontinued Reading Recovery Children: Those children who successfully met the program criteria of reading at or above the average of the class.

Random Sample Children: Those children who were randomly selected from the population of first grade children. Children who received any

Reading Recovery lessons, those on the waiting list, and special education students were deleted from the sample.

State Random Sample: 526 children from the state (in 1993-94) were randomly selected, with 5-8 from each Reading Recovery school. This group provides a basis for determining an average range for comparison as a state **Average Band.**

Waiting List Children: Children who, at the beginning of the school year, were judged to be at-risk of reading failure in their schools, but who did not have the lowest scores on the Observation Survey and, therefore, were not selected for Reading Recovery. As Maine is under implemented at this time (i.e. there are not enough Reading Recovery teachers to cover the needs of the lowest achieving students in all schools), only the lowest achieving students received Reading Recovery. Therefore, the next lowest achieving students were "waiting" for Reading Recovery services.

Pretest and post-test scores on the Observation Survey are used to determine progress for all children. Data is sent to The Ohio State University for analysis. Descriptive statistics (e.g., numbers of children discontinued, mean performances for Reading Recovery, random sample, and waiting list children) are calculated and the results returned to the University of Maine.

Summary of Maine Results for 1991-1993

1991-92. During the first year of Reading Recovery in Maine, 161 children were served through two sites. Of the 121 children who received 60 or more lessons, 101 (84 percent) successfully completed the program (discontinued) as independent readers.

1992-93. In the second year of Reading Recovery, 473 students received services through four sites. Of the 372 who received full programs, 296 (80 percent) were discontinued as successful readers. The proportion of discontinued children who achieved end-of-year scores equal to or exceeding the state average band ranged from a low of 87 percent for the Writing Vocabulary to a high of 97 percent for Writing Dictation. Ninety-three percent of the discontinued children achieved end-of-year scores on the Text Reading measure equal to or exceeding the average band. The proportion of program children who achieved end-of-year scores equal to or exceeding the state average band ranged from a low of 76 percent for Text Reading Level to a high of 90 percent for Writing Dictation. Thirty-four percent of the children discontinued prior to April 1. Students discontinued before April 1 continued to make progress on all measures after the intervention lessons were withdrawn, particularly on Text Reading on which their mean performance rose from Text Level 12 (1st grade) to 18 (2nd grade).

Maine Program Evaluation Results for 1993-94

The following questions guided the program evaluation for 1993-94:

1. What proportion of Reading Recovery program children were discontinued?

2. How did Reading Recovery and waiting list students compare to a group of randomly selected peers at the end of first grade?

3. What was the progress from entry through end-of-year testing for children discontinued from the program prior to April 1?

Table 2. Summary of Observation Survey Scores for Discontinued and Program Reading Recovery Children and Waiting List Children

Measure	Term	Discontinued	Program	Waiting List
Writing Vocabulary	Fall	5.11	4.53	7.97
	Spring	52.04	48.34	40.15
Dictation	Fall	8.14	7	13.2
	Spring	35.39	34.39	33.0
Text Reading Level	Fall	0.78	0.68	1.03
	Spring	18.4	15.96	12.89

1. What proportion of Reading Recovery children were discontinued?

In year three of the program in Maine, of the 858 children served, 471 (74%) were discontinued as independent readers. Table 2 shows beginning and end scores for those children.

2. How did Reading Recovery students and waiting list students compare to a group of randomly selected peers at the end of first grade?

Figures 1, 2, and 3, display the growth rate for Reading Recovery discontinued and program students and waiting list students compared to that of a random sample of their peers on measures of writing vocabulary, dictation and text reading. Seventy-eight percent were at or above average levels in writing vocabulary (Figure 1), ninety-five percent on dictation (Figure 2), and sixty percent in reading (Figure 3), indicating that many in this group made accelerated progress and caught up with their peers.

At the beginning of the year, the waiting list children all scored higher than either discontinued or program children on all measures.

The random sample comparison illustrated in Figs. 1, 2, and 3 provides a very rigorous test for Reading Recovery children because the average band in Maine is drawn from the middle and upper level achievement groups. Reading Recovery students, children waiting for Reading Recovery services, and special education students are excluded from the random sample.

Though the waiting list children were not the lowest achievers in their first grades, they were nevertheless considered at-risk of failing to learn how to read. In many schools where there were not enough Reading Recovery teachers to serve the at-risk first graders, waiting list children received alternative small group help. However, it is noteworthy that, at the end of the year, Reading Recovery students scored higher on all measures than waiting list children. The most meaningful measure of the three is the text reading level. Waiting list children scored at level 12, which is below first grade reading level, while program children scored at level 15, grade one reading level, and discontinued children scored at level 18, which is considered to be grade 2 reading level.

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Fig. 1: Progress of Total Reading Recovery and Waiting List Children Compared to a Random Sample on Vocabulary

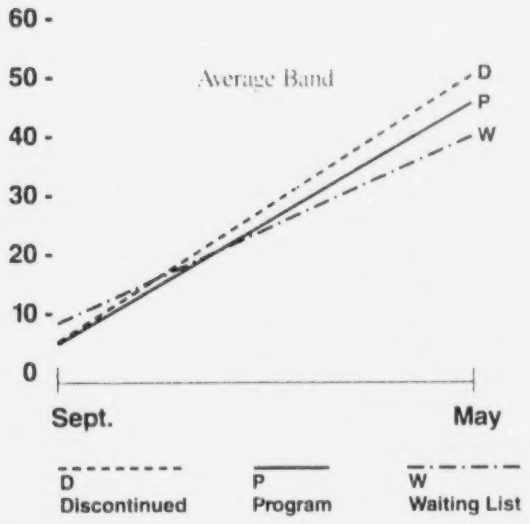


Fig. 2: Progress of Total Reading Recovery and Waiting List Children Compared to a Random Sample on Dictation

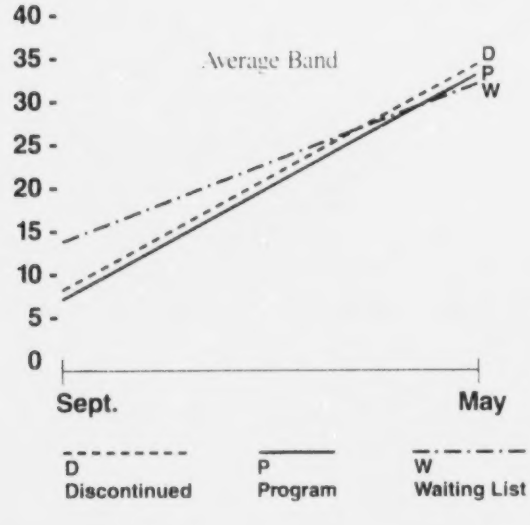
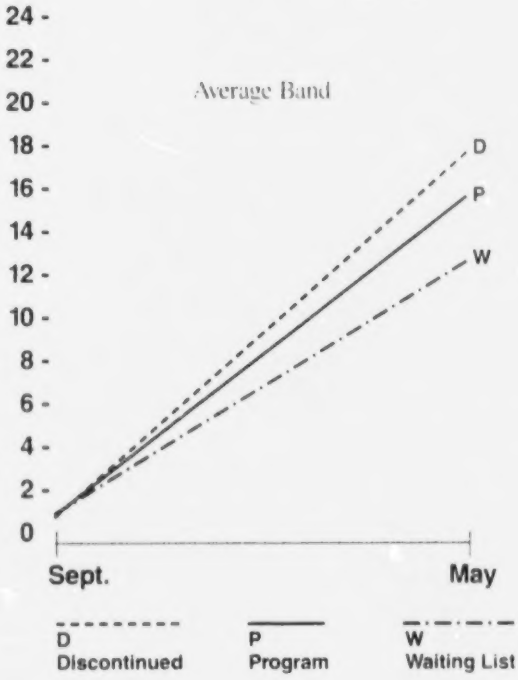


Fig. 3: Progress of Total Reading Recovery and Waiting List Children Compared to a Random Sample on Text Reading



3. What was the progress from entry through end-of-year testing for children discontinued from the program prior to April 1.

A goal of Reading Recovery is to help children build self-extending systems that allow them to continue to learn without extra help. Children who enter the program early in the first grade year are likely to be released mid-year and then are expected to make progress through participation in regular classroom instruction alone. The extent to which this goal is reached is indicated by assessing the progress made from mid-year to end-of-year by

the group of children who are discontinued during the year. Average rate of progress for this group is presented in Table 3.

Table 3. Progress Rate of Students Discontinued Prior to April 1.

Measure	Entry	Exit	End-of-Year
Writing Vocabulary	4.78	44.07	52.88
Dictation (Max = 37)	8.09	34.83	35.42
Text Reading Level (Max = 30)	0.83	14.03	20.02

Discontinued children entered the program with an average text reading level score of .83, discontinued with a score of 14.03, and ended the year with an average reading level of 20.02. To put this in perspective, they entered as nonreaders, discontinued at a level considered to be the end of first grade, and at the end of first grade year reached a level equivalent to second grade reading level as usually defined in traditional reading systems.

Data from the 1993-94 project indicated that Reading Recovery was successfully implemented during its third year and that the program has potential for helping Maine's at-risk students become successful readers in their first year of school. As before, surveys of classroom and Reading Recovery teachers, parents, and administrators were very positive. Some of those comments are presented at the beginning of this report. The expansion of the program also provided an opportunity to identify some of the problems to be solved if Reading Recovery is to achieve its potential.

National Program Evaluation Results

As Reading Recovery has grown, the academic community has shown interest in various effects of the program. Researchers have compared Reading Recovery with other intervention programs, evaluated its cost-effectiveness, and studied its long-term effects on children. Others have explored such areas as the success of the teacher training component and the impact of the program on learning disabled students. This research, combined with the data collected each year on children who receive the program, provides answers to some of the most commonly asked questions about Reading Recovery.

How do discontinued Reading Recovery students compare to their peers at the end of first grade? Reading Recovery students, all of whom begin first grade at the bottom of their class, make considerable progress as a result of the program, especially when combined with effective classroom instruction.

The first end-of-year study on Reading Recovery in the United States (Pinnell, Deford, & Lyons, 1988) indicated that 73.5 percent of the 136 randomly assigned Reading Recovery students were discontinued from the program. Over 90 percent of the discontinued students were performing at or above average on four measures of reading ability at the end of first grade, and more than 70 percent were performing at or above average on three other measures of assessment. At the end of the year, the gain score of the Reading Recovery students on a nationally normed standardized test, California Test of Basic Skills (CTBS), was 8.6 compared to a score of 2.4 earned by a similar group of randomly assigned first graders who had received another form of compensatory education.

Researchers at Texas Woman's University found that the 1,789 Reading Recovery students who successfully completed the program performed at an average or better level on three measures of reading and writing ability at the end of their first grade year (Askew, Frasier, & Griffin, 1993).

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Individual Reading Recovery sites documented similar results in their annual reports. The Halifax, Canada (Talwar & Hill, 1993) site reported that in the spring of 1990, their discontinued Reading Recovery students read an average text level of 15, compared with an average first grade band of 11-19. At the end of the school year 1991, the discontinued Reading Recovery first graders were reading an average text level of 16, compared to an average band of 11-21, and in 1992, discontinued Reading Recovery students read at an average level of 16, compared to an average band of 15-22.

In 1992-93 (National Diffusion Network, 1993), 83 percent (22,493) of all children in North America who had received a complete Reading Recovery program were discontinued. When compared to a random sample of classmates at the end of the year, 85 percent of these students scored at or above the average band range on writing vocabulary, 94 percent on dictation, and 83 percent on text reading.

Are the gains made in Reading Recovery sustained over time?

Research indicates that Reading Recovery students not only become average or better readers in first grade, they develop a self-extending learning system, which enables them to continue learning at least as quickly as their peers in later grades.

A follow-up study to the Pinnell et al. (1988) study showed that students served in Reading Recovery maintained progress in second, third, and fourth grades (Pinell, 1989). Fourth grade Reading Recovery students demonstrated that they could accurately read text at the sixth grade level or above. Additionally, these children proved to be excellent spellers, producing spellings on a fifth grade level spelling test closer to conventional than their randomly selected peers.

Smith-Burke, Jaggar, & Ashdown (1993) tested 174 second grade children who had successfully completed Reading Recovery as first graders in 1990-91. Their performance on several measures was compared to that of a grade level, random sample of 177 children. The following results highlight the strong residual effects of the program:

- Eighty-nine percent of the Reading Recovery children scored within or above the average band on text reading compared to 80 percent of the random sample, and 23 percent of the Reading Recovery children scored above the average band.
- Ninety-six percent of the Reading Recovery children scored at grade two or above, compared to 89 percent of the random sample.
- At the end of second grade, the average Reading Recovery child was able to read passages roughly equivalent to fifth grade basal reading material with at least 90 percent accuracy.

How does Reading Recovery compare to other early intervention programs?

Large scale and local investigations demonstrate that Reading Recovery is a particularly effective method to improve the reading acquisition of at-risk children.

A recent study (Pinnell, Lyons, Deford, Bryk, & Seltzer, 1994) compared Reading Recovery with four other types of early intervention: (1) an individual tutorial program similar to Reading Recover, but taught by a teacher with an abbreviated training program; (2) Direct Instructional Skills Plan (Cooter & Reutzel, 1987), an individual tutorial taught without Reading Recovery by experienced reading teachers; (3) a small group intervention taught by trained Reading Recovery teachers; and (4) a control group, which received a standard federally funded remediation program.

The final report concluded that Reading Recovery children performed significantly better than children from an equivalent control group and the three other intervention programs. Reading Recovery was the only group that scored better on all tests, showing long-term improvements in reading. At the end of 70 days of instruction, Reading Recovery children were reading five levels ahead of children who received regular remedial reading lessons. Even though the control group continued to receive lessons for the rest of the year, Reading Recovery children were still three reading levels above the remedial group average when all children were tested the following fall.

Another investigation supported the findings of this study. Reading Recovery students were compared with a group of students similarly at-risk and a reference group comprised of average-performing first graders (Gregory, Earl, & O'Donoghue, 1993). The Reading Recovery students received daily Reading Recovery lessons plus regular classroom instruction. The comparison group received regular classroom instruction, plus necessary intervention services (ESL, special education, parent volunteers, private tutors). The reference group received regular classroom instruction only.

Researchers reported that Reading Recovery students scored higher than comparison students on end-of-year measures, that the performance of Reading Recovery students improved at a faster rate than their at-risk peers who did not receive Reading Recovery, and that Reading Recovery students made significantly greater gains than both their average-achieving classmates and the comparison group based on results of the Woodcock Reading Mastery Test, the Metropolitan Achievement Test, a spelling assessment, and a miscue analysis.

Is Reading Recovery cost-effective?

Evidence indicates that Reading Recovery can reduce costs associated with at-risk students by lowering retention rates and thereby reducing the need for remediation and special education referrals.

Dyer (1992) found that while Reading Recovery requires an initial and ongoing investment, its implementation is educationally sound and reduces the necessity of more commonly used means of intervention. The study concluded that school districts implementing the program will realize significant long-term cost savings through reductions in grade retentions, remedial Chapter 1 services, and special education placements—savings that can more than offset the short-term costs of implementing and operating the program.

Using figures from an average school district in Maine to compare Reading Recovery per student expenditures to those of other interventions, indications are that investment in Reading Recovery could save a district up to $39,740 per student. This estimate is based on a student who is assigned to special education over six years compared to a student who does not require special education services after receiving a successful Reading Recovery intervention in grade one. See Table 4.

Table 4. Cost Comparison of Interventions in a Typical Reading Recovery District in Maine

Reading Recovery	**$2,332**	**per student**
Retentions	**$4,254**	**per student**
Chapter 1	**$1,243**	**per student**
	$14,000	**(six years)**
Special Education	**$7,012**	**per student**
	$42,072	**(six years)**

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Researchers have also examined Reading Recovery's ability to reduce first grade retentions, the need for further remediation, and the number of students classified as learning disabled, with positive results:

- One study found that the first grade retention rate in a school district that had implemented Reading Recovery dropped from 4.3 percent in the three years before implementation to 2.9 percent four years after system-wide implementation (Lyons & Beaver, in press).

- The same study showed that the district reduced its enrollment in learning disabilities classrooms at the end of first grade from 1.8 percent of the first grade in the three years before full implementation to .64 percent in three years after implementation.

- Another study documented the experience of a district that reduced its first grade retentions significantly in the five years following the implementation of Reading Recovery, which resulted in considerable savings (Lyons, Pinnell, & Deford, 1993).

- In Maine, Westbrook Assistant Superintendent of Schools Robert Hall reports that his district has eliminated two Step-up Program teachers (transitional program) at a savings of approximately $60,000 per year as a result of Reading Recovery.

Program Implementation

1. Teacher Leader Districts: How Training Sites Developed

It generally takes a school district two years to develop a Reading Recovery Training site: one year to have a qualified member of its staff trained as a Teacher Leader at the University of Maine and a second year to establish a training site and begin training teachers.

The Application Process

To become an approved training site, a school district (or consortium of districts) begins by applying to the University of Maine Center for Reading Recovery to have a qualified member of its teaching staff trained as a Teacher Leader. As part of the application process, prospective sites must secure financial support within the district and obtain the approval of the district superintendent.

The applying district also selects an administrator in the district to assume administrative responsibilities for Reading Recovery. This site coordinator oversees the preparation of the facility, manages the budget, negotiates contracts, and acts as administrative liaison with the Reading Recovery network.

The Training Year

Applicants are selected for the program in the spring, and the year-long residency program begins the following fall. The Teacher Leader training is a graduate program taken for credit at the University of Maine. The program for Teacher Leaders includes five components:

1. Graduate-level courses consisting of a clinical practicum, a seminar in theory and current research, and supervised fieldwork;

2. The daily teaching of four Reading Recovery students;

3. Field requirements, including assisting with the training of Reading Recovery teachers, conducting colleague visits to observe other class members teaching a Reading Recovery lesson, and visiting other Reading Recovery sites;

4. Preparation for implementing Reading Recovery in their district; and,

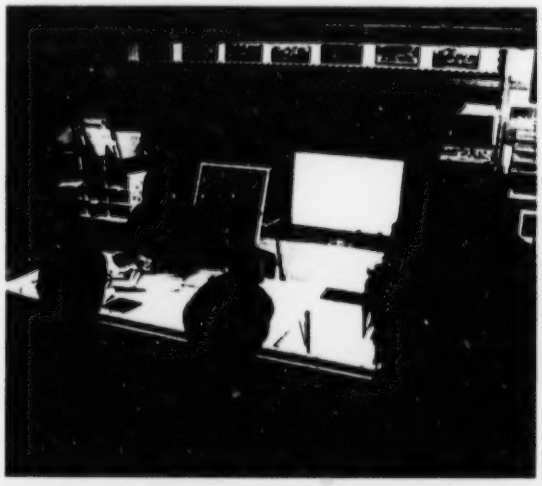
5. Attendance at a number of professional development activities including the Northeast Regional Literacy Conference and Reading Recovery Institute.

During the training year, Teacher Leaders work with their site coordinators to prepare the site for its first year of operation. They inform appropriate groups about the program, prepare the space where the teacher training classes will be held, order materials for teacher training, and assist in the selection of appropriate teachers for the training class.

Implementation Year

Following their training year, Teacher Leaders and site coordinators work together to maintain the site. Teacher Leaders train new teachers, collect data on children served, and prepare an annual site report. They also participate in a variety of continuing contact events and activities, including national conferences and training seminars, in order to further their own professional development. In subsequent years, Teacher Leaders visit previously trained teachers and conduct continuing contact sessions.

Behind the Glass



Extensive use is made of a one-way glass for training lessons. Once a week during the training year, two teachers each work with one of their children individually behind a one-way glass while the rest of the teachers-in-training observe from the other side of the glass. Guided by the Teacher Leader, the teachers engage in an intensive discussion of what they are watching. After the lessons, teachers participate in a critique session. Use of the one-way glass has been proven to be one of the most powerful components of staff development in Reading Recovery.

Teachers-in-training continue to work full-time in their school districts as they receive instruction in Reading Recovery procedures. The most common arrangement during the training year and subsequent years is for the teacher to spend half a day teaching Reading Recovery students and the second half in other teaching duties.

2. Teacher Districts: implementing Reading Recovery in a School

To implement Reading Recovery at the classroom level in districts where the program has been adopted, qualified teachers enroll in a year-long academic course taught by a certified Teacher Leader. The courses are offered for graduate credit through the University of Maine. Through interactive clinical experiences and theoretical study guided by a Teacher Leader, teachers learn how to implement all components of a Reading Recovery lesson and to select teaching procedures appropriate for individual students.

Implementation Models

Reading Recovery has been implemented in Maine using a wide variety of models. Each day, Reading Recovery teachers are required to spend half the day (two and one-half hours minimum) working one-to-one with children (usually four). The remainder of the day is assigned to various other teaching and support functions. Districts have reported using the following configurations for assignments of teachers:

- Chapter 1 remedial reading or Special Education teachers spend half of their day in Reading Recovery and the other half working with individuals or small groups using other instructional strategies.
- Two teachers share a first grade classroom where one teacher teaches the class and the other uses Reading Recovery with individual children and then they switch roles for the second half of the day.
- Kindergarten teachers teach one session and then spend half a day in Reading Recovery.
- Migrant education teachers use Reading Recovery in extended-day sessions.
- Half-time teachers are employed as Reading Recovery teachers.

The Costs of Implementation

The costs of adopting Reading Recovery include those associated with the establishment of a site, as well as ongoing site maintenance. Start-up expenses include training fee, materials, and expenses for the Teacher Leader-in-training; the installation of a one-way glass at the new site for teacher training; a portion of the site coordinator's salary during the training year; and tuition for courses. Following the training year, new sites provide funding for Teacher Leader salaries, continuing contact for Teacher Leaders, site staff support, and training materials. For specific information regarding costs, contact the Center for Reading Recovery at the University of Maine.

The Benefits of Implementation

Implementing Reading Recovery requires a substantial commitment on the part of the district. The integrated nature of the instructional programs for children and educators, the use of quantitative data to measure the results of the intervention on all children served, the strong professional development model—these and the other features of the program simultaneously ensure its effectiveness and demand a high level of support from participating individuals and districts. This level of support is justified by the accelerated growth achieved by Reading Recovery program children and the transformation of teachers who become true change agents in their districts.

Key Elements of Reading Recovery

- **Reading Recovery is an early intervention program that supports accelerated learning.**
- **Reading Recovery serves the lowest achieving children.**
- **Reading Recovery is effective with diverse populations.**
- **Children develop a self-extending system of learning to read and write.**
- **Student outcomes are sustained over time.**
- **Reading Recovery teachers serve children as part of their training.**
- **Reading Recovery provides continuous professional support for teachers.**
- **All Reading Recovery teachers, Teacher Leaders, and trainers work with children daily.**
- **Program success is directly tied to student performance.**
- **Reading Recovery is cost-effective.**
- **Reading Recovery is a nonprofit program.**

The Reading Recovery Lesson

Reading Recovery teachers use a battery of six measures called the Observation Survey to select the lowest-achieving children in their classrooms (see box). In addition to regular classroom reading instruction, these children receive daily Reading Recovery lessons.

The first two weeks of each child's program are designed to develop the student's strengths. This period, referred to as roaming around the known, is comprised of a variety of literature-based activities that build the child's confidence and establish a rapport between teacher and child. The teacher uses this time to learn about the child's ability and build a foundation for the individualized lessons that will follow.

Each lesson includes six components:

- Reading many known stories
- Reading a story that was read once the day before
- Writing a story
- Working with magnetic letters
- Working with a cut-up sentence
- Reading a new book that will be read independently the next day

During these reading and writing activities, the teacher provides just enough support to help the child develop the effective strategies that independent readers use. This teacher assistance supports the process through which children learn to predict, confirm, and understand what they read. Writing opportunities are essential for developing strategies for hearing sounds in words, representing messages, and for monitoring and checking their own reading and writing.

Selecting and Evaluating Reading Recovery Children

At the beginning of each academic year, children at-risk of reading failure are selected for Reading Recovery using classroom teacher judgment and results from the Observation Survey. Looking across measures, teachers select children who are the lowest achievers. The Observation Survey is also used to evaluate children who receive the program. The following six measures comprise the diagnostic tool:

1) ***Letter Identification:*** Children are asked to identify 54 different characters, including upper- and lower-case letters and conventional print for "a" and "g".

2) ***Word Test:*** Children are asked to read a list of 20 words drawn from the words used most frequently in early reading material.

3) ***Concepts about Print:*** Children are asked to perform a variety of tasks during a book reading. These tasks, presented in a standard situation, check on significant concepts about printed language, such as directionality and concept of word.

4) ***Writing Vocabulary:*** Within a 10-minute period, children are asked to write all the words they know. The score on this test is the number of words spelled accurately.

5) ***Dictation Test:*** Testers read a sentence to the children, who write the words, indicating their ability to analyze the word for sounds.

6) ***Text Reading Level:*** Measures of text reading level are obtained by constructing a gradient of text difficulty, then testing for the highest level read with accuracy of 90 percent or better. Levels are drawn from a basal that is not part of Reading Recovery instruction.

The framework of a Reading Recovery lesson remains fairly consistent from child to child. However, each lesson is unique. The child and teacher have their own interactions which determine the direction each lesson may take. The teacher constantly observes the child's reactions and questions. All will vary based upon the child's responses. Books to be used in the lesson are chosen specifically with each child in mind. Books are selected from a variety of little books from numerous publishers for their appropriateness of natural language, meaning, and level of difficulty.

At the beginning of each lesson the child reads familiar books. These books were introduced in earlier lessons and have been placed in a group specifically for the child to read with ease, confidence, and fluency. Some problem-solving may also occur in this part of the lesson, although the primary focus is to ensure student success with a minimum of teacher assistance. After the familiar book, the child reads a book that was read once the day before. The teacher keeps a detailed record of the child's behavior for use in selecting the appropriate teaching strategy.

Next the child writes a story. This allows the child the opportunity to observe the connectedness of reading and writing. The child writes independently and is assisted by the teacher in areas where assistance is needed. The teacher's involvement will decline as the child becomes more independent over time. A sentence written by the child is cut up and the child reassembles it using visual information and language structure.

Each day the teacher selects a new book to introduce to the child at the end of each lesson.

Working with Books and Stories

Reading Recovery students typically work with an entire book or a complete story, rather than with unconnected sentences or word lists. By reading and writing continuous texts, children learn to use many different aspects of print—including letters, words, sentences, and pictures—to understand complete stories just as successful readers do.

Accelerated Learning

The goal of Reading Recovery is accelerated learning. Children are expected to make faster than average progress so that they can catch up with other children in the class. The majority of Reading Recovery children typically reach an average reading level after 12-16 weeks of daily instruction. During this period, they continue to work in the regular classroom for all but 30 minutes each day.

Work from Strengths

Accelerated learning is possible because Reading Recovery teachers base their instruction on careful observation of what each child already knows about reading and writing. This approach creates efficiency, as the individualized instruction that follows "will work on these strengths and not waste time teaching anything already known" (Clay, 1993, p.3).

Independent Learning

The goal of Reading Recovery is not just to improve the reading and writing ability of children, but to help them learn how to continue improving on their own so that later remediation is unnecessary. With the assistance of their Reading Recovery teacher, children learn the strategies that good readers use. Reading Recovery instruction continues until the child has a self-extending system for literacy learning.

Thirty Minutes of Reading Recovery . . .

1. Reading Familiar Books

The child is able to read an entire book, exhibiting behaviors indicative of good readers. The teacher supports those behaviors through appropriate and well-chosen questions or prompts.

2. Reading a Book That Was Read Once the Day Before

The child reads the new book from the previous lesson independently while the teacher notes reading behaviors. The teacher records important information to be used in making instructional decisions, selecting teaching points to be used after the reading.

3. Magnetic Letter Work

The child learns how to discriminate and distinguish between letters and how words and word parts work.

4. Writing a Story

The child composes a story about a book read or a personal experience. Through joint problem-solving, the child and teacher work together to write the story. The child writes as independently as possible.

5. Working with a Cut-up Sentence

After writing the story, one of the sentences is written on a sentence strip and cut up. The child uses knowledge of the sentence to search and monitor for cues while reassembling the story.

6. Reading a New Book

The teacher introduces a new book, providing a framework for the meaning and language structures the child will meet. This book should offer a little more challenge than previous books read in the lesson, but be well within the child's reach.

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Sandra Lowry, Teacher Leader
945-4844

BELFAST
Sally Leclair, Site Coordinator
338-4020
Rebecca Mailloux, Teacher Leader
338-1858

BENTON
Susan Giorgetti, Site Coordinator
453-4941
Judith Karam, Teacher Leader
453-4248

BETHEL
Ann Holt, Site Coordinator
824-2582
Melanie Ellsworth, Teacher Leader
665-2227

CARIBOU
Arthur Benner, Site Coordinator
496-6311
Nancy Todd, Teacher Leader
493-4250

ELLSWORTH
University Center for Reading Recovery
581-2438

HARRINGTON/MACHIAS
Ronald Ramsay, Site Coordinator
483-6681
Gael Romei, Teacher Leader
483-2920

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